ABSTRACT OF THE DISCLOSURE

An object of the present invention is to efficiently embed digital-watermark information in a document image by adjusting robustness and quality of the image. In order to achieve the object, watermark information and image information are input, a first parameter determining embedding strength and a second parameter determining image quality are set, and the digital-watermark information is embedded in the image based on the first and second parameters. When the entire information cannot be embedded, the first or second parameter is adjusted so as to embed a larger amount of digital-watermark information in the image.